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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,972	10/02/2003	Yacine El Mghazli	Q77793	6295
23373 7590 02/03/2011				
SUGHRUE MION, PLLC				
2100 PENNSYLVANIA AVENUE, N.W.				
SUITE 800				
WASHINGTON, DC 20037				
EXAMINER				
NGUYEN, DUSTIN				
ART UNIT		PAPER NUMBER		
2454				
NOTIFICATION DATE		DELIVERY MODE		
02/03/2011		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/675,972

**Applicant(s)**

EL MGHAZLI ET AL.

**Examiner**

DUSTIN NGUYEN

**Art Unit**

2454

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 November 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-912)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Claims 1-19 are presented for examination.

### **Response to Arguments**

2. Applicant's arguments filed 11/10/2010 have been fully considered but they are not persuasive.
3. As per remarks, Applicants argued that (1) Wang does not teach or suggest reserving resources in a packet communication network and that the packet network is a hybrid network comprising both active nodes and passive nodes.
4. As to point (1), Examiner respectfully disagrees since Wang clearly discloses to connect with end-user node 1B', end-user node 1A generates a conventional passive packet, which is received by active gateway 4A' in LAN 2A, active gateway 4A' then generates program code specifying traffic parameters, QoS parameters, and other QoS parameters, ..., active gateway 4A' sends the generated program code in an active packet P to active gateway 4B' in intermediate network 3A [ i.e. network comprising both active nodes and passive nodes as claimed ] [ Figure 4; and col 6, lines 4-14 ]. In addition, in response to applicant's arguments, the recitation "hybrid network comprising both active nodes and passive nodes" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any

patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

5. As per remarks, Applicants argued that (2) there is no teaching or suggestion of sending a reservation packet comprising a request for reservation of resources constituting an execution environment for the active data flow.

6. As to point (2), Applicants disclose active network refers to a network comprising so-called active nodes or routers, that is to say those capable of being programmed or configured remotely in order to be able to dynamically modify specific processing on the data passing through the network, in this case the routers receive appropriate packets which can comprises commands, a code or a program to be executed by the router concerned, as well as associated information [ paragraph 0002 ]. In the same field of invention, Wang discloses networks are linked together through interconnecting apparatus referred to as active gateways, each active gateway has functions that enable the active gateway to perform QoS mapping dynamically and adaptively, by using active packets P that are transmitted when a connection is set up [ col 3, lines 11-16 ]. Wang also discloses each gateway provides at least the function of execution of programs in active packets which enables an active gateway to open an active packet, execute the program included in the payload of the packet, and take action according to the execution results,

the action taken includes managing the allocation of necessary resources in the network to which the active gateway belongs, QoS management operations in a network are thus managed in accordance with requirements [ i.e. request for a reservation of resources constituting an execution environment for the active data flow ] [ col 3, lines 28-42 ]. In addition, Wang discloses the payload of an active packet specifies QoS requirements and QoS mapping methods in the form of a program [ col 3, lines 17-27 ]. And thus, Wang clearly teaches the claimed limitation as written.

7. As per remarks, Applicants argued that (3) there is not teaching or suggest that the reservation packet is an active packet.

8. As to point (3), Wang clearly teaches the payload of an active packet specifies QoS requirements and QoS mapping method in the form of program, that is, a set of rules or an algorithm, and example of QoS mapping table that relates QoS information in one network to QoS information in another network [ col 3, lines 17-27 ]. Wang also teaches active gateway extracts the program from the active packet, executes the program, and uses the security protection function to check the safety of the execution results, if the execution results pass the security check, active gateway takes action according to the execution results, negotiating for resources in network to satisfy the programmed QoS requirements [ i.e. reservation packet is an active packet as claimed ] [ col 4, lines 5-38 ].

9. As per remarks, Applicants argued that (4) there is not teach or suggest that a reservation packet comprises parameters which are common to the active nodes of the network.

10. As to point (4), Wang provides an example that discloses when end-user node 1A requests a connection to end-user node 1B, end-user node 1A generates program describing its QoS requirements and the QoS mapping method to be employed. Each active gateway executes the program in the active packet along the path, and active gateway 4F returns a message indicating that the requested quality of service has been guaranteed [ i.e. broadly interpreted as parameters which are common to the active nodes as claimed ] [ Figure 1; and col 4, lines 4-67 ].

11. As per remarks, Applicants argued that (5) there is no teach or suggest that the resources constituting the execution environment comprises at least one of memory, passband size, and processing time.

12. As to point (5), and as indicated in previous Office Action, Nomura clearly discloses reservation resource comprises at least one of memory, passband size, and processing time [ i.e. the second method uses an RSVP for which control of quality can be configured dynamically, and the RSVP works to reserve transmission paths and memory resources within an apparatus so that an application can be executed ] [ col 2, lines 3-10 ].

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 1-6, 8-11, 13, 14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang [ US Patent No 6,693,912 ], in view of Nomura et al. [ US Patent No 6,930,984 ].

15. As per claim 1, Wang discloses the invention as claimed including a method for reserving resources in a packet communication network, wherein the packet network is a hybrid network comprising both active nodes and passive nodes, wherein the active nodes consider information in active packets, said information relating to an execution environment of a respective active node, and wherein an active data flow comprises a set of active packets executed by the execution environment, the method comprising:

sending a reservation packet comprising a request for reservation of resources constituting an execution environment for the active data flow [ i.e. end-user node generates a program describing its QoS requirements, the program is placed in an active packet, which is sent through to active gateway ] [ col 4, lines 5-15 ];

receiving said reservation packet by an active node in the network [ i.e. active gateway extracts the active packet ] [ col 4, lines 13-30 ]; and

reserving resources of the active node according to the request [ i.e. if the requirement is met, then allocating the necessary network resources ] [ col 4, lines 31-56 ],

wherein said reservation packet is in an active packet format, wherein the active packet format comprises an indicator that indicates that the active packet comprises executable code or identifies a server from which an executable code is downloadable [ i.e. payload of an active packet specifies QoS requirements and QoS mapping method in the form of a program, that is a set of rules or an algorithm, active packets include programs like these, coded so as to be executable by the active gateway ] [ Figure 6; and col 3, lines 17-27 ];

wherein the reservation packet comprises parameters which are common to the active nodes of the network [ i.e. traffic parameters and other QoS parameters ] [ col 4, lines 5-10; and col 6, lines 30-37 ].

Wang does not specifically disclose

wherein said resources constituting the execution environment comprise at least one of memory, passband size, and processing time.

Nomura discloses

wherein said resources constituting the execution environment comprise at least one of memory, passband size, and processing time [ i.e. reserving memory using RSVP ] [ col 2, lines 8-10 ].

It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Wang and Nomura because the teaching of Nomura would enable communication to be performed between a terminal employed by a user and a server, which is



the destination of communication, at a quality set for the user or application in advance [ Nomura, col 30, lines 18-25 ].

16. As per claim 2, Wang discloses wherein said reservation packet is in RSVP protocol format [ col 3, lines 56-60 ].

17. As per claim 3, Nomura discloses wherein said reservation packet is a PATH type packet in accordance with RSVP protocol [ col 2, lines 3-27 ].

18. As per claim 4, Nomura discloses wherein the reservation packet comprises an identifier of the said active data flow [ col 2, lines 3-27 ].

19. As per claim 5, Wang discloses wherein said reservation packet comprises parameters for processing data contained in said active data flow, wherein the processing of the data comprises executing code by the active node in the network, and wherein, after receiving the reservation packet, the active node loads the executable code and executes the loaded code [ i.e. executing the program at the entry node of the second communication network ] [ Abstract; and col 2, lines 1-7 ].

20. As per claim 6, Wang discloses wherein said processing parameters comprise said code executable [ col 3, lines 17-27 ].

21. As per claim 8, Wang discloses wherein after the active node loads the executable code, the active node sends a confirmation of said loading of the executable code [ i.e. report result ] [ col 4, lines 24-38 ].

22. As per claim 9, Wang discloses wherein the node is provided for receiving the active packets, for detecting if one of the received active packets is the reservation packet and for reserving corresponding resources for processing the data of the active data flow according to the resource reservation request for the said active data flow and contained in the active reservation packet [ i.e. allocating the necessary network resource ] [ col 4, lines 31-38 ].

23. As per claim 10, Nomura discloses wherein the packet network is an IP protocol network [ col 1, lines 15-28 ].

24. As per claim 11, Nomura discloses wherein the node is an IP active router [ Abstract; and col 1, lines 15-28 ].

25. As per claim 13, Wang discloses wherein the confirmation of said loading of the executable code indicates that said loading was successful [ i.e. report result ] [ col 4, lines 24-38 ].

26. As per claim 14, Nomura discloses wherein the reservation packet comprises a first identifier identifying a protocol for the active data flow, a second identifier identifying a source or destination of the active data flow, and a third identifier identifying resources of the active node that are to be reserved for executing code subsequently provided in the active packets of the active data flow [ col 2, lines 3-27; and col 3, lines 7-28 ].

27. As per claim 19, Wang discloses wherein the reservation packet comprises parameters for processing data contained in the active data flow, in which the parameters include a command defining conditions of use of the resources by the active node or a command defining processing of an active packet by the active node [ i.e. program code ] [ col 3, lines 17-28 and lines 33-42 ].

28. Claims 7, 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang [ US Patent No 6,693,912 ], in view of Nomura et al. [ US Patent No 6,930,984 ], and further in view of Eichert et al. [ US Patent No 6,393,474 ].

29. As per claim 7, Wang and Nomura do not specifically disclose wherein said processing parameters identify a server and code downloadable by said active node from said server. Eichert discloses wherein said processing parameters identify a server and code downloadable by said active node from said server [ col 2, lines 60-col 3, lines 3 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Wang, Nomura and Eichert because the teaching of Eichert would enable to provide a dynamic policy

management using active network devices that provide for policy enforcement [ Eichert, col 2, lines 1-4 ].

30. As per claim 12, Eichert discloses wherein the active packet format comprises a marker in a header of the active packet, the marker indicating whether the packet is active or passive, wherein, when the marker indicates the packet is active, the marker identifies that the active packet comprises at least one of command, code, and program for execution in the active node and wherein the reservation packet has the marker indicating the packet is active [ i.e. active packet having objects and scripting programming language [ col 2, lines 47-67 ].

31. As per claim 15, Eichert discloses wherein the active packets comprise executable code or information identifying a server from which executable code is downloadable [ col 2, lines 60-col 3, lines 3 ].

32. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang [ US Patent No 6,693,912 ], in view of Nomura et al. [ US Patent No 6,930,984 ], and further in view of Simpson et al. [ US Patent Application No 2003/0084151 ].

33. As per claim 16, it is rejected for similar reasons as stated above in claim 1. Furthermore, Wang and Nomura do not specifically disclose wherein said resources constituting the execution environment comprise a processing time for processing of the active data flow. Simpson

discloses wherein said resources constituting the execution environment comprise a processing time for processing of the active data flow [ i.e. reserving time for processing ] [ paragraph 0004 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Wang, Nomura and Simpson in order to increase capacity.

34. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang [ US Patent No 6,693,912 ], in view of Nomura et al. [ US Patent No 6,930,984 ], and further in view of Frouin et al. [ US Patent Application No 2005/0018607 ].

35. As per claim 17, it is rejected for similar reasons as stated above in claim 1. Furthermore, Wang and Nomura do not specifically disclose wherein said resources constituting the execution environment comprise a passband size for the active data flow. Frouin discloses wherein said resources constituting the execution environment comprise a passband size for the active data flow [ paragraf 0006 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Wang, Nomura and Frouin in order to make network elements able to better manage application flows.

36. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang [ US Patent No 6,693,912 ], in view of Nomura et al. [ US Patent No 6,930,984 ], and further in view

of Simpson et al. [ US Patent Application No 2003/0084151 ] and Frouin et al. [ US Patent Application No 2005/0018607 ].

37. As per claim 18, Wang and Nomura do not specifically disclose wherein said resources constituting the execution environment comprise a processing time for processing of the active data flow and a passband size for the active data flow. Simpson discloses wherein said resources constituting the execution environment comprise a processing time for processing of the active data flow [ paragraph 0004 ], and Frouin discloses wherein said resources constituting the execution environment comprise a passband size for the active data flow [ paragraph 0006 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Wang, Nomura, Simpson and Frouin in order to increase capacity and to make network elements able to better manage application flows.

**38. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dustin Nguyen whose telephone number is (571) 272-3971. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached at (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/DUSTIN NGUYEN/  
Primary Examiner, Art Unit 2454